

MERRY
CHRISTMAS

AND A

HAPPY NEW YEAR

FROM THE

MONTANA
AERONAUTICS COMMISSION
&
STAFF



Volume 18 No. 12

December, 1967

PILOT REGISTRATION DUE!

Pilot registration for 1968 will commence on January 1, 1968.

NOTE: 1967 registration cut off date will be November 30. All pilot registration applications received after December 1 will be considered 1968 registration and cards will be issued commencing January 1, 1968.

All pilots residing in the State of Montana must hold a current registration with the Montana Aeronautics Commission as State registration is mandatory. All monies derived from pilot registration provide the vital funds necessary for Search and Rescue Operations in our state.

New pilots and new residents, registering for the first time in Montana, will receive the complete Airport Directory. All pilots re-registering will receive the latest revisions as soon as they are completed.

Due to recent Commission action—every 1968 registrant will receive one copy of the Aeronautical Chart. The new chart will be distributed to each 1968 registered pilot after January 1.

The 1968 registration form is identical to the 1967 form, however the new form **must be completed** by each pilot in order to register, or re-register, and forwarded with the \$1.00 fee to the Aeronautics Commission.

Registration forms are available from local General Aviation Operators, the Montana Aeronautics Commission (P. O. Box 1698, Helena, Montana 59601) and forms will be mailed to current pilot registrants by January 1.

AIRCRAFT REGISTRATION DUE DATE JANUARY 1

The first day of January, 1968 is the effective date of the Montana Aeronautics Commission regulations (Chapter 10—Aircraft Registration) complying with the 1967 Extraordinary Legislative Session Senate Resolution No. 2.

Application forms complete with the Commission Regulations and cover letter are being forwarded to Montana aircraft owners listed as registered aircraft owners by the F.A.A. The following is reprinted for the information of aircraft owners that have not been contacted previously.

If you require application forms, please contact the Montana Aeronautics Commission immediately.

TO ALL CONCERNED:

The following information is submitted to assist in the filing of applications for Montana Registration of

the FAA Aircraft Registration Certificate.

Chapter 10 of the Montana Aeronautics Commission Regulations is printed on the back of the application form and is self-explanatory. The following information is submitted to simplify the completion of the application for registration (See Example on page 9).

As contained in the instructions on the face of the application, all entries one through eleven must be completed in duplicate by the applicant. All entries must be printed in ink or typewritten, except number twelve, and number twelve must be signed in ink. The applicant should retain the duplicate copy of the application for his own file. Make the \$1.00 registration fee payable to the MONTANA AERONAUTICS COMMISSION. Mail the master copy and the application fee to the Aeronautics Commission. A Registration Decal and certified copy of the application form will then be issued after receipt of proper application and fee.

The Aeronautics Commission will, in the "space for Commission use only"—at the lower right of the application form, place the FAA registration number, name of owner, registration decal number, county, date, date of registration and the

(continued on page 9, col. 2)

**Official Monthly Publication
of the
MONTANA AERONAUTICS
COMMISSION**

**Box 1698
Helena, Montana**

**Tim Babcock, Governor
Charles A. Lynch, Director**

**Jack R. Hughes, Chairman
E. B. (Ted) Cogswell,
Vice Chairman
Clarence R. Anthony, Secretary
Carl (Bill) Bell, Member
Gordon R. Hickman, Member
Walter Hope, Member
Robert H. Howe, Member**



Director's Column



**TO: ALL COMMERCIAL
AIR OPERATORS OF THE
STATE OF MONTANA**

Re: Insurance Coverage

As you were previously informed, the Montana Aeronautics Commission held a rehearing concerning the provisions of paragraph number 9 on page 8 of General Order No. 9-100. You have previously received copies of the General Order as well as Revision No. 1 thereto.

The rehearing was held on October 25, 1967, at the Commission offices in Helena. As a result of the rehearing the Commission has decided to revise number 9 in the manner set forth in the enclosed Revision No. 2 to General Order No. 9-100. The general effect of the revision is to eliminate the previous requirement that coverage should apply to any and all commercial flights irrespective of whether the aircraft involved are specifically described in the policy. It will still be required, except for pilot qualification requirements, that the insurance policy shall not exclude violations of the Federal Aviation Act of 1958, as amended, or any rule, regulation, or order of the Federal Avi-

ation Agency or Civil Aeronautics Board.

The time for compliance has been extended until January 1, 1968.

DATED this 15th day of November, 1967.

Sincerely,
Charles A. Lynch, Director
State Aeronautics Commission
of the State of Montana

SUPPLEMENTAL OPINION

After hearing held on July 13, 1967, the Commission issued its General Order 9-100 and copies thereof were served upon all commercial air operators in this state. The Commission solicited any protests or objections and ordered that if protests or objections were received, the effective date of the Order would be stayed until further order of the Commission. The Commission also ruled that if protests or objections were received the Commission would then make a decision as to whether another public hearing would be held. Furthermore, the Commission ruled that it could modify its Order if it saw fit so to do.

Protests and objections were received and these stayed the effective date of the Order.

Thereafter, the Commission issued its Revision No. 1 to General Order No. 9-100 in which, among other things, it directed that any person dissatisfied with paragraph 9 on page 8 of General Order No. 9-100 could, not later than October 1, 1967, file a petition for rehearing on the provisions of that paragraph alone. Petitions for rehearing were received from the Montana Aviation Trades Association and from Hensley Flying Service of Havre, Montana. On October 6th, 1967, the Commission granted the petition for rehearing and directed that the rehearing would be held upon the provisions of paragraph 9 of General Order No. 9-100 at the offices of the Commission in Helena commencing at the hour of 2:00 o'clock p.m. on the 25th day of October, 1967. At that time and place the rehearing was held before the Director of the Commission, Charles A. Lynch, and was presided over by the Commission's counsel, Henry Loble, who was duly appointed to that position by the Director. Service of the order granting rehearing was duly made and the legal and requisite notice was given and had thereof.

Appearances at the rehearing were as follows:

Dave Brannon — Rocky Mountain Aviation Agency, Cody, Wyoming.

J. F. Lynch — Lynch Flying Service, Inc., Billings, Mont.

David Stradley — Gallatin Flying Service, Belgrade, Mont.

Jeff Morrison — Morrison Flying Service, Helena, Mont.

Walter C. Hensley — Hensley Flying Service, Havre, Mont.

Jack R. Hughes — Johnson Flying Service & Montana Aeronautics Commission, Missoula, Mont.

G. C. Waite — Waite & Company Insurance, Bozeman, Mont.

Joe Flynn — Joe Flynn Agency, Inc., Helena, Mont.

Jim Pickens — Combs-Pickens Montana Aircraft Co., Billings, Mont.

Bitty Herrin — Morrison Flying Service, Helena, Mont.

Audre Crawford — Joe Flynn Agency, Inc., Helena, Mont.

Edgar G. Obie — Obie's Flying Service, Chinook, Mont.

Cliff Cunningham — Sky Ways Air Credit, Ogden, Utah.

Al C. Newby — Flight Line, Inc., Belgrade, Mont.

Witnesses testified orally, and documentary evidence was received. All present were given every opportunity to express their views and objections, if they desired. The rehearing commenced at 2:00 o'clock and terminated at about 4:00 o'clock p.m.

Two questions, other than the provisions of paragraph 9 of General Order No. 9-100, were referred to at the rehearing. Firstly, and objection was made that in the preface to paragraph 2 of General Order No. 9-100 the statutory definition of commercial air operator failed to include that portion of the statute which defines a "commercial air operator" as one offering his services **for any commercial purpose** for compensation. The Commission finds this objection well taken, and directs that the preface to paragraph 2 of General Order No. 9-100 be amended in accordance therewith. Secondly, an objection was made that the provisions of paragraph 8(D) of General Order No. 9-100 do not comply with the insurance laws of the State of Montana. The Commission finds this objection is not well taken and denies the same. Moreover, the Commission is not engaged in the enforcement of the insurance laws of

the State of Montana, but only with the provisions of Chapter 122 of the Session Laws of the Fortieth Legislative Assembly of the State of Montana, 1967, now codified as Sections 1-311 through 1-321, R.C.M., 1947.

Considerable testimony was received on the subject of paragraph 9 of General Order No. 9-100 and from that testimony and the documentary evidence received the Commission has made its decision to amend paragraph 9 as is hereinafter set forth. The Commission feels that the amendment is justified and that the Commission will be protecting the public by such an amendment, and at the same time will not be making unreasonable insurance requirements for commercial air operators.

FINDINGS

1. General Order No. 9-100, together with Revision No. 1 thereto shall continue to be the decision and order of the Commission except as is hereinafter specifically set forth, and the matters and things set forth in General Order No. 9-100, Revision No. 1 thereto, and this Revision No. 2 thereto are reasonably necessary to provide adequate compensation for damage incurred through an accident involving a commercial air operator and for the administration and enforcement of Chapter 122 of the Session Laws of the Fortieth Legislative Assembly of the State of Montana, 1967, (now sections 1-311 through 1-321 inclusive R.C.M., 1947).

CONCLUSION

The public interest requires the adoption of the following revision, which is Revision No. 2, to said General Order No. 9-100.

REVISIONARY ORDER NO. 2

IT IS ORDERED THAT:

1. Paragraph 9 on page 8 of General Order No. 9-100 is hereby amended to read as follows:

"9. The policies, or certificate above referred to shall not, except for pilot qualification requirements, be subject to any exclusion by virtue of violations by said commercial air operator of any applicable provisions of the Federal Aviation Act of 1958, as amended, or of any rule, regulation, order or other legally imposed requirement prescribed by the Federal Aviation Agency or Civil Aeronautics Board."

2. The first or preface paragraph to paragraph 2 of General Order No. 9-100 is amended to read as follows:

"2. Every commercial air operator shall procure and thereafter continue in effect, so long as such operator continues to offer his services for any commercial purpose for compensation, adequate protection against liability imposed by law upon such operator for the payment of damages for personal bodily injuries, including death resulting therefrom, and property damage as a result of an accident, subject, however, to the following minimum limits:"

3. Compliance with General Order No. 9-100 as amended, supplemented, or revised by the Commission shall be completed by all commercial air operators not later than January 1, 1968, unless the Commission shall otherwise order.

4. General Order No. 9-100, with Revisions No. 1 and No. 2 thereto, shall be reissued, and signed by the Director, as the act of the Commission, its revised or codified form so that said General Order and all revisions thereof are contained in a single comprehensive document.

5. That service of Revision No. 1 to General Order No. 9-100 has been fully completed and made upon every commercial air operator as defined in the applicable law by mailing as shown in the records of the Commission.

6. That service of this Revision No. 2 to General Order No. 9-100 shall be made by mailing to all persons to whom the original General Order No. 9-100 and Revision No. 1 thereto were mailed, and to all persons who filed a petition for rehearing and who appeared at the rehearing on October 25, 1967.

7. Save and except as is herein specifically set forth, said General Order No. 9-100 remains in full force and effect.

8. This order may be signed by the Director of the Commission with the same force and effect as if signed by the individual members of the Commission itself.

DATED at Helena, Montana, this 15th day of November, 1967.

CHARLES A. LYNCH, Director
State Aeronautics Commission
of the State of Montana



CALENDAR

December 2, Stanford — Airport Dedication and Fly-In Breakfast.

December 5, 6, 7 & 8, Dallas, Texas — National Aviation Trades Association Annual Convention.

December 12 & 13, Helena — Montana Aeronautics Commission monthly meeting.

December 31 — Entry Deadline for Aviation Mechanics Safety Awards.

January 1, 1968 — Effective Date of the Montana Laws Regulating:

Pilot Registration
Aircraft Registration
and the

Commercial Air Operator Insurance

January 11, Spokane, Washington — International Northwest Aviation Council Board of Directors Meeting.

January 21-24, Las Vegas, Nevada — (Stardust Hotel) 20th Annual Meeting and Helicopter Showcase of the Helicopter Association of America.

January 25, 26 & 27, Billings — Montana Aviation Trades Association Annual Convention.

March, Great Falls — The Sixth Flight Instructor Refresher Course, sponsored by the Aeronautics Commission. (Date and further details will be announced.)

May 3, 4, 5, Cut Bank — Montana Pilots Association Annual Convention.

General aviation airplanes today account for 98.8 percent of all civil airplanes operating in the United States. Their operations total 79.9 percent of the flight hours.

STATISTICS

Will your first accident be your last day alive?

61/37
65/22
78/18
66/18

ACCIDENT TOTAL FATALITIES

1964 Total	61	37
1965 Total	65	22
1966 Total	78	18
1967 Total To-Date	66	18

ATTENTION: All G. I. Flight Training School Applicants

By C. R. "Ron" Adams
Aviation Education Supervisor

Your attention is invited to last month's edition of the Montana Aeronautics Commission Newsletter, specifically to the Director's Column. Information pertaining to submitting applications for approval as a G. I. Flight Training School were contained in Mr. Lynch's column.

These guidelines were furnished by Mr. Jerry Toner, Veterans Education and Training Inspector, who is the State Department of Public Instruction's approving authority for veteran training programs.

Since publication of the last Newsletter, Mr. Toner has received further correspondence from the Veterans Administration. The Aeronautics Commission has received a Special Report from Frank Kingston Smith, Executive Director, National Aviation Trades Association in Washington, D. C. Both the Veterans Administration correspondence and N.A.T.A.'s Special Report say basically the same things. We have reproduced the N.A.T.A. Special Report in its entirety for your information:

SPECIAL REPORT

National Aviation Trades Association
1346 Connecticut Avenue, N.W.
Washington, D. C. 20036
202/482-6675

G. I. BILL FLIGHT TRAINING

National Aviation Trades Association has learned that some of our members are already giving courses for Multi-engine, Seaplane, Instrument Instructor, ATR and Helicopter ratings. These courses have not yet been approved for veteran's benefits by the FAA and should be terminated until we obtain a change in the regulations.

The only courses approved under FAR Part 141 for veteran's training are Commercial, Instrument and Flight Instructor. NATA is working with the FAA to obtain an extension of approval to other courses for all flight schools which have been in existence for more than two years.

NATA will issue complete information on applications for all approved courses when the matter has been finalized.

Frank Kingston Smith
Executive Director

Mr. Toner has utilized the Commission as a consultant agency to clarify technical aspects relating to the G.I. Flight Training Program. The problem that has been pointed out in the above dispatch from N.A.T.A. was foreseen by Montana. The need for including helicopter, multi-engine, instrument instructor and ATR training courses are considered to be necessary in the overall flight training programs. Assuming a delay in getting these particular courses approved by F.A.A., Mr. Toner made recommendations to prospective applicants as to how they should include the above courses in their applications.

Basically, the recommendation was to have the basic flight training programs listed as follows:

1. Commercial Pilot Course
 - a. Commercial Helicopter Pilot Course
 - b. Commercial Multi-Engine Pilot Course
 - c. Commercial ATR Pilot Course
2. Instrument Pilot Course
3. Flight Instructor Pilot Course
 - a. Instrument Flight Instructor Pilot Course

If disapproval is forthcoming, only the courses in question will be disapproved, not the three major training programs. If this should occur, approval cannot be expected until the F.A.A. acts on establishing acceptable criteria for these courses.

FEDERAL AVIATION ADMINISTRATION INTINERARY LISTING



Airport	Dec.
Culbertson	6
Glasgow
Glendive
Great Falls	7
Lewistown	20
Miles City	21
Missoula	21
Sidney

NOTE: Provisions have been made to give private, commercial and flight instructor and instrument written examinations, **ON AN APPOINTMENT BASIS ONLY** at the following FAA Flight Service Stations:

Bozeman	Lewistown
Butte	Livingston
Cut Bank	Miles City
Dillon	Missoula
Great Falls	

MAC INSTALLS DOWNED AIRCRAFT LOCATOR BEACON

The Montana Aeronautics Commission recently installed the necessary radio and indicator equipment in the Commission's Cessna 206 which affords aural and visual detection of radio signals emanated from the ground and in the air by aircraft in distress or crashed condition. This device and indicator is connected to one of the regular aircraft receivers, therefore it can home and receive aural signals from any transmitter to which the receiver can be tuned. This allows tracking or homing on control towers, aircraft, or any transmitter that is in the frequency range of the receiver. The frequency range at the present time is VHF 118.0 to 126.9 in 100 kilocycle increments.

During an emergency condition such as a crash landing, etc. if an aircraft is equipped with a "Downed Aircraft Locator Beacon" which is activated on emergency VHF channel 121.5 with a battery life of 48 to 50 hours, the equipment in the Commission's aircraft would make it possible to locate the aircraft transmitter within a very short time. Any pilot who has this particular type equipment in his aircraft should so state in the remarks section of his Flight Plan at the time he files. In the event of an emergency the F.A.A. and the Aeronautics Commission would have this information and an immediate search could be instituted and discovery and rescue expedited.

BASS MOONEY ADDS SHOP

Frank Bass, owner/manager of Bass Mooney, Lewistown, announces the addition of a full line shop and the services of Luverne LeDoux, A&P/and AI. Luverne has 18 years of experience and is qualified in all types of aircraft.

"F & E PROJECTS"

The following approximate dates are from a report of the Federal Aviation Administration, prepared by their Program and Plans Branch.

VHF/UHF DF ESTABLISH
Cut Bank, Montana—July 1968
Lewistown, Montana—August 1968

COMMISSION MEETS IN HYSHAM AND INSPECTS NEW AIRPORT



Commission shown leaving the attractive Courthouse at Hysham following the meeting: Left to right, Robert Howe, Counsel Henry Loble, Carl "Bill" Bell, Ted Cogswell, Gordon Hickman, Walter Hope, Jack Hughes, Clarence Anthony and Director Lynch.

The Montana Aeronautics Commission held its November meeting at the Treasure County Courthouse in Hysham followed by an inspection of the new airport.

The following members and staff attended: Jack R. Hughes, Chairman; Ted Cogswell, Vice Chairman; Clarence R. Anthony, Secretary; Carl (Bill) Bell, Member; Gordon R. Hickman, Member; Walter Hope, Member; Robert H. Howe, Member; Henry Loble, Commission Counsel; Peter Pauley, newly appointed Commission Attorney; Director Charles Lynch; Assistant Director, Jim Monger; Safety and Education Officer, Jack Wilson; Aviation Education Supervisor, Ron Adams; Commission Secretary, Mrs. Peacock; and Publications Supervisor, Joyce McCutcheon.

The meeting arrangements were made by Walter Hope and the Commission and staff members were guests at the Hope ranch the preceding afternoon and evening.

It was indeed a pleasure for the Commission to visit the Hysham-Hardin area, a complete "treat" to have guested at Hope's ranch and the cooperation and hospitality of the Hysham courthouse officials and staff was deeply appreciated.

AIRLINE NEWS

FRONTIER

Frontier Airlines showed a 42 per cent increase in scheduled passenger miles flown over the carrier's 14-state system in October.

A total of 52, 542,000 revenue passenger miles were flown in October compared with the 37,021,000 revenue passenger miles recorded in October last year.

Passenger traffic figures in October 1966 and 1967 include both Frontier Airlines and Central Airlines results. This past October 1, Central was merged into Frontier. This report reflects the first full month passenger traffic for the expanded, merged company.

Montana cities served by Frontier had the following passenger boardings during October along with percentage differential over October boardings a year ago.

MONTANA

CITY	1967	1966	Percent
Billings	2,890	2,223	+30
Bozeman	446	*
Glasgow	242	167	+45
Glendive	78	65	+20
Great Falls	1,395	813	+72
Havre	87	74	+18
Lewistown	201	147	+37
Miles City	136	197	-31
Missoula	895	*
Sidney	95	132	-28
Wolf Point	*	52
TOTAL	5,124	3,818	+34

* Not operating.

CONGRATULATIONS



CERTIFICATES ISSUED RECENTLY TO MONTANA FLYERS

STUDENTS

Borg, Milo K.—Fairview
Wham, Cecil C.—Wyola
Sande, Gary A.—Geraldine
Finstad, Mervin H.—Devon
Ledgerwood, Glenn B.—Fort Benton
Kyle, William D.—Missoula
Medley, Bruce E.—Missoula
Byrer, Karl W.—Bozeman
Beck, Theodore P.—Highwood
Blutt, Kenneth E.—Ekalaka
Huffman, Donald J.—Bozeman
Paige, Alan D.—Sheridan
Nuber, James R.—Bozeman
Warden, Erwin L.—Lander, Wyo.
Zeller, Karl F.—Milford, N. J.
Drummond, George L., Jr.—Ulm
Spevacek, Robert E.—Geraldine
Barney, David E.—Pray
Krier, Rene J.—Pease AFB, N. H.
Morrison, Kenneth K.—Helena
Carpenter, Ronald R.—Billings
Roppe, Neil T.—Turner
Truchot, Gary F.—Choteau
Findlond, Donald F.—Milltown, N. J.

PRIVATE

Thompson, Richard E.—Lewistown
Beck, John E.—Billings
Pangborn, Paul W.—Midland, Mich.
Shaules, David K., Jr.—Billings
Shore, Erle M.—Billings
Heizer, John W.—Billings
Levi, Phillip M., Jr.—Miami, Fla.
Dutton, Joseph M.—Sand Springs
Smith, Harold M.—Helena
Howard, Marilyn G.—Libby
Haapala, Marvin H.—Bozeman
Torgerson, Roald L.—Ethridge
Wilhelm, Clayton—Helena
McClintick, Bette L.—Kalispell
Willard, Donald G.—Great Falls
Barnard, Joseph J.—Spenard, Alaska
Lorenz, Mavis M.—Missoula
Normandeau, Dwayne E.—Missoula
Tomlinson, Donald F.—Missoula
Johnson, Rollin A., Jr.—Missoula
Anderson, William D.—Missoula
Simpson, Robert C.—Malta
Darcy, William S.—Helena
O'Donnell, Ray L.—Havre
Kolb, Larry R.—Missoula
Rule, Larry—Sheridan

COMMERCIAL

Orley, Joan M.—Lewistown
Morrison, John F.—Helena
Saxman, John B., Jr.—Alberton

INSTRUMENT

Schwartz, Edgar G.—Anaconda
Cox, Graham J.—Calgary, Alberta

MULTI ENGINE

Johnson, Carl L., Jr.—Glasgow

FLIGHT INSTRUCTOR

Kreitinger, John M.—Fairview
Jensen, Nels H.—Missoula

FLIGHT INSTRUCTOR INSTRUMENT

Jensen, Nels H.—Missoula

ADVANCED GROUND INSTRUCTOR

Knopf, Richard P.—Edina, Minn.
Simpson, Robert C.—Lewistown
Hansen, Lloyd A.—Missoula
Hall, Kemper W.—Great Falls

GOLD SEAL

Simpson, Robert C.—Lewistown
Hansen, Lloyd A.—Missoula

SPECIAL TYPE RATINGS

Stohr, Penn R.—Missoula (DC-3)
Robinson, John W.—Missoula (DC-3)

SPECIAL PURPOSE

Sproule, Gordon P.—Calgary, Alta.,
Can.
Skocdopole, Harold C.—Olds,
Alberta, Can.

AIRFRAME MECHANIC

Mathias, John L.—Great Falls

REPAIRMAN—ACCESSORY

Radabah, Cecil S.—Kalispell

SENIOR PARACHUTE RIGGER

Clarke, Conald L.—Missoula
(Back Type)
Morton, Robert L.—Missoula
(Back & Chest)
Stitzinger, Gary W.—Spokane, Wash.
(Back & Chest)

—
Last year general aviation airplanes flew a combined total average of nine million flight miles every day. This compares to a combined airline total average of 2.3 million plane miles per day.

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Last year U. S. manufacturers exported more than 2,900 general aviation airplanes to 69 countries of the Free World.

AIRPORT NOTES



By James H. Monger
Assistant Director, Airports

Hobson—The Judith Basin County Commissioners have submitted an application for a general aviation utility airport for Hobson. This proposed new airport would be a single runway of stabilized turf construction, under the Small Airport Plan of the State. The MAC is now in the process of having the property appraised.

Fairview—The Dawson County Commissioners have submitted an application for a new airport to serve the town of Fairview. The proposed new airport would be a single runway of turf aggregate construction. Land owners are now being contacted by local interested parties and an area West of town will be site checked, both from the ground and the air, in the near future.

Livingston—The Joint City/County Airport Board at Livingston recently opened bids for the construction of a 50 foot by 80 foot hangar/shop building to be constructed on Mission Field. The successful bidder was Stratford Steel Company of Billings, bidding a Butler building at \$17,350. This price does not include heat or electricity which will be bid separately at a later date. The Aeronautics Commission loaned the local Airport Board \$18,000 on this local/State project.

Bozeman—The electorates in Gallatin County will be going to the polls on January 15th to vote on a bond issue of approximately \$285,000. The bond financing would be the matching funds for a local/Federal project consisting of lengthening the present runway from 6,500 feet to 9,000 feet. Bozeman had previously been on the approved list of the MAC for a \$35,000 loan for this proposed project. Bozeman has released the loan approval due to the necessity for the large bond issue.

Circle—Gus Albert, Contractor from Miles City, has completed the base for the new runway on the Circle Airport. The new NW/SE

paved runway will be 3,000 feet by 50 feet. Construction has stopped for the season; however, the gravel base will be useable throughout the winter, weather permitting. The MAC loaned \$25,000 to the Joint Airport Board at Circle toward the financing of the local, State, and Federal aid project.

Lewistown—The Lewistown Airport Commission has retained the Consulting Engineering firm of Wenzel & Co. from Great Falls, to conduct a complete zoning plan for the Lewistown Airport.

Conrad—Fred Steel, Electrical Consulting Engineer from Great Falls, is presently conducting engineering for a lighting project on the Conrad Airport. A lighting project would consist of medium intensity lights on the East/West runway. This project will be financed jointly by the local, State and Federal governments.

Hysham—The general aviation utility airport at Hysham is now completed and open for traffic. Stephen Kenney, Contractor from Hardin, completed the airport in mid-November. The runway is 3,000 feet by 75 feet and is of stabilized turf construction. There will be no snow removal on this airport. The airport was sponsored by Treasure County through the Aeronautics Commission's Small Airport Program. The new airport is located 1½ miles East of town just South of old Highway No. 10.

Aeronautical Chart—The 1968 Montana Aeronautical Chart will be delivered from the printer, Jeppesen & Company, on December 15th.

Runway Lights—Presently four (4) airports in Montana are installing a low intensity runway lighting system. The locations are Ashland, Hardin, Harlem, and Jordan. The Aeronautics Commission has assisted these four communities by providing rotating beacons and field and office engineering for the systems. The runway lights themselves have been financed by the local government with the exceptions of Hardin, which was sponsored by the Junior Chamber of Commerce, and the St. Labre Mission purchased the Ashland lights.

Laurel—Bids were opened on November 9th for the construction of a new runway on the Laurel Airport. The runway will be graded, 4,000 feet by 150 feet. There will be no pavement at this time. The project attracted seven (7) bidders and Mor-

risson & Maierle, Consulting Engineers of Billings, report that the low bidder was C. L. Adams & Son with a total base bid of \$23,388.80. The successful bidder for the incidental items was Walter Mackin & Son with a bid of \$4,893. Construction will start upon receipt of the grant offer from the FAA. This is a local, State, and Federal aid project with the MAC loaning the City of Laurel \$19,644.

WOLF POINT RECEIVES JET PROP SERVICE

On November 9th, Frontier Airlines inaugurated jet prop service into Wolf Point's newly reconstructed airport. Wolf Point City/County Officials; Mayor Robert Penner, Kenneth Nyquist, Hank Arndt and Robert Reed joined Frontier's Representative Dan Kraber and his wife for the inaugural flight of the 53 passenger, 580 from Glasgow. The flight was met by local representatives, R. E. "Pete" Coffey, Lyman Clayton, George Shanks and Keith Bryan and the Ribbon Cutting ceremony was attended by over 50 persons.

The schedule of Frontier's new service is as follows:—Flight 608—Inbound from Minot—Arrive Wolf Point 4:35 PM; Flight 608 Westbound — Departs Wolf Point 4:41 PM; Flight 609 Eastbound — Arrives Wolf Point 1:37 PM.

Mr. Al Martensen is Frontier's Wolf Point Sales and Service Manager and Luis Pecora is station agent.

The major airport reconstruction on the Wolf Point Airport which made the new jet prop service possible consisted of resurfacing and extending the runway from 4,000 feet to 5,100 feet by 100 feet wide and constructing taxiway and apron. The total cost was \$207,000. Thomas Construction Company of Billings was the contractor and Thomas, Dean & Hoskins of Great Falls the engineer.

This was a local, State and Federal aid project with the Montana Aeronautics Commission loaning \$60,000 to the local airport board. Roosevelt county contributed approximately \$40,000 worth of excavation work.

The new runway not only brings Wolf Point and Northeastern Montana better airline service, but will provide improved mail service as Wolf Point is the Northeastern Montana mail distribution center.



Ribbon cutting ceremonies took place in a slight snow storm, however, it did not dampen the spirits and enthusiasm of the participating officials of Frontier Airlines, Chamber of Commerce, and the City/County.



Officials inspecting the new Wolf Point Airport, left to right, County Commissioner Pete Coffey, Mayor Robert Penner and Postmaster Ernest Shamley.

We congratulate the City of Wolf Point and Roosevelt County on this splendid project to bring modern improved service to their area.

ATTENTION ALL PILOTS:

When flying in the Libby area be aware that a 1 5/8" cable has been placed across the gorge above the site of Libby Dam. The cable, 17 miles upstream from Libby, is swung between two 200 foot high painted tower structures.

The low point in the cable will be 400 feet above the surface of the river, making the cable 2,530 feet above sea level.

The cable will carry a series of star floodlights, 15-18 inches in diameter which are painted with fluorescent paint.

PROPOSED RULE WILL END SPECIAL VFR— WILL THIS HURT YOU?

By Jack Wilson
Safety and Education Officer

On the request of the Airline Pilots Association and the Air Transport Association, the FAA is seriously considering a rule change which would prohibit any aircraft from entering any control zone unless under an Instrument Flight Clearance if there is less than a 1,000 foot ceiling or less than three miles visibility. This change is being recommended in the name of safety. This notice of proposed rule making would do away with all special VFR clearance to operate in a control zone clear of clouds and with as little as one mile visibility. This proposed rule would prohibit and eliminate VFR operation of fixed wing aircraft in control zones, when weather conditions are less than the basic VFR weather minimum provided or prescribed for control zones.

I wonder why the Federal Aviation Administration is proposing to prohibit all special VFR clearances when it is readily admitted by that Agency that the problem exists safety-wise only in high density terminal areas and congested traffic areas. I also wonder why they do not change the particular portions of their regulation to preclude or deny clearances to VFR flights through control zones by special VFR clearance and limit their special VFR clear-

ances only to those VFR flights which intend to take off or land in that particular control zone. I also wonder what they propose to do at some of the airports in the western United States where the IFR minimums are above the VFR minimums at those particular airports. I further wonder if it would not be better to designate certain control zones and airport traffic areas as not furnishing special VFR operations rather than putting a blanket prohibition of special VFR on all airports and all control zones in the entire United States.

NOTE:

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Regulatory Docket or Notice number which in this case is Docket No. 8463; Notice 67-45 and be submitted in duplicate to: Federal Aviation Administration, Office of the General Counsel, Attention: Rules Docket GC-24, 800 Independence Ave. S.W., Washington, D. C. 20590. All communications received on or before December 18, 1967 will be considered by the Federal Aviation Administrator before taking action on the proposed rule.

APRON PROJECT COMPLETED ON INTERNATIONAL AIRPORT, GREAT FALLS

By Tom H. Palmer, Airport Manager

The old ramp in front of the terminal building was concrete 7" thick and was situated on a very poor base. The concrete had failed completely in many places and therefore had to be removed. The Airport Commission at Great Falls borrowed \$80,000 from the Aeronautics Commission for sponsor's funds for this emergency project. The old pavement was removed all the way to the sand stone which varied from 17" to 31" below the surface. The base for the new apron was then built up with a number of courses of gravel which were rolled to 100% compaction. The new base is 34" thick and the new asphaltic concrete surface course is 4" thick.

The contractor on this project is Northern Materials of Billings and Great Falls. The company flies a twin engine Beechcraft Queen Air



Great Falls International Airport's new apron project.

and is very air-minded. The total project was bid at \$145,555.50. This figure will be exceeded somewhat due to extra materials removed and replaced. The old ramp had served its purpose as it was constructed during World War II. This local, State, and Federal aid project will now accommodate the modern heavy jet aircraft serving Great Falls International Airport.

FAA INSPECTORS' CORNER



By LAUREN D. BASHAM
GA Operations Inspector
GADO No. 9

Now that winter is fast approaching, we must take a searching look at many of the flight procedures that we have used throughout the previous summer months. While winter flying in Montana in some respects is more enjoyable than at any other time of the year, we must be more aware of our personal limitations and those of our equipment. Many winter flights can and will be made when our navigation radio is of very little use to us due to the necessity of low altitude operation. It is essential that we understand how to use this equipment properly. While normally the VOR is less susceptible to static or other atmospheric phenomena than the now outmoded four course radio range, there are certain areas in which the equipment per-

formance will be somewhat less than desirable. To alleviate some of the problems that could arise, we submit the following:

(1) Initially a VOR facility should not be used for navigational purposes until it has been positively identified. The coded identification is the most reliable means of proper identification. If the voice feature is used as a means of identification, it should positively identify the geographical facility such as "Bozeman VOR".

(2) VHF frequencies are described as having a line-of-sight usability. While this is only theoretically true, the best reception and consequently the most reliable indication will always be obtained when a line-of-sight situation actually exists. For a line-of-sight the facility situation of 100 feet above the station, the best reception distance is 45 statute miles. However, if the facility in question is TVOR, we must consider a second limitation—that of **design operational range** and in the above instance this distance would be 25 miles maximum up to and including 12,000 feet. The operational range of all classes of VOR facilities as well as the restrictions to service range is published in Parts I and III of the Airman's Information Manual.

(3) We should always use our navigational radio as an **AID** to navigation when conducting a VFR type operation and remember to double check our position by reference to a **current** Aeronautical Chart.

(4) Finally, the received components and the function of each:

- (1) Course Selector — permits the selection of any desired course.
- (2) Left-right needle — shows the position of the aircraft in relation to the course selected (remember — position information only — regardless of the aircraft heading).
- (3) To-From Indicator — indicates the position of the aircraft in relation to the VOR station (whether or not the indicated course if flown would take the aircraft TO or FROM the VOR station).

Now: A little Trick-of-the-Trade in case the To-From indicator doesn't work.

(1) Center the needle on any identified station.

(2) Rotate bearing selector by increasing the bearing:

If—needle moves left—bearing is TO

If—needle moves right—bearing is FROM

It is possible to interpret needle movement without first centering the needle but this involves an understanding of course ambiguity which is not affected by the above procedure.

Then in conclusion, a small note on weather—remember that in mountainous areas, snow showers can cause "white-out" condition when the horizon is not visible; that snow showers can and often do develop in seemingly seconds — placing the unwary pilot on instruments; that station reports are based on conditions at a particular station — sometimes miles from another reporting station with unknown conditions in between.

In the past 11 years, the number of general aviation aircraft instrument approaches to U. S. airports increased about 300 per cent. In 1956 only 8½ per cent of all instrument approaches were made by general aviation pilots. By 1967, this figure increased to 25 per cent.

Airline travel accounts for more inter-city passenger miles than do the railroads and bus lines combined, by a margin of three to two.

A diet is for people who are thick and tired of it.

A/c Reg—continued from page 1

registrar, and along with the registration decal return a copy of the completed registration form to the person or firm making the application. This completed application form is the owner or leasees verification that the registration has been completed.

The registration decal should be placed on the left side of the vertical fin on single vertical fin aircraft, and on the left side of the left vertical fin on twin or more vertical fin

aircraft, and on the left side of the fuselage immediately forward of the stabilizer root on aircraft that have the Bonanza type V stabilizers. This decal should be placed in the center of the vertical fin in the upper one-third of the vertical fin and on the V tail type aircraft, such as the Bonanza, the decal should be placed horizontally on the longitudinal axis of the aircraft approximately four inches forward of the stabilizer.

If any questions arise, please feel free to contact us.

APPLICATION FORM EXAMPLE

STATE OF MONTANA
AERONAUTICS COMMISSION
Box 1698
Helena, Montana 59601

Application for State Registration FAA Aircraft Registration Certificate

1. _____		owner <input type="checkbox"/>
(NAME OF OWNER(S) OF AIRCRAFT)		lessee <input type="checkbox"/>
2. _____		
(STREET ADDRESS)	(TOWN OR CITY)	(STATE) (COUNTY)
3. _____		
FAA REGISTERED OWNER (IF DIFFERENT THAN ABOVE) ADDRESS		
4. _____		
LOCATION OF AIRCRAFT (COUNTY)	(TOWN OR CITY)	(AIRPORT)
5. _____		10. _____
(MAKE AND MODEL OF AIRCRAFT)	(FAA AIRCRAFT REGISTRATION NUMBER)	
6. _____		11. _____
(MODEL YEAR)	STATUS OF AIRCRAFT (FLYABLE OR DISMANTLED)	
7. _____		
(AIRCRAFT SERIAL NUMBER)		
8. ENGINES	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 or more <input type="checkbox"/>	I certify that all entries on this form are true and correct.
9. _____		12. _____
(HORSEPOWER)	(DATE)	(SIGNATURE)

INSTRUCTIONS

1. All Entries (1 through 11) must be completed in duplicate by Applicant.
2. All Entries must be printed in ink or typewritten, except number 12. (No. 12 must be signed in ink.)
3. Make \$1.00 registration fee payable to the MONTANA AERONAUTICS COMMISSION.
4. Applicant should retain duplicate copy.
5. Mail Master copy and application fee to MONTANA AERONAUTICS COMMISSION.
6. Registration Decal will be issued upon receipt of proper application and fee.

FORM NO. 8888-11-67-KM 10-67 78122 THIRUNE

This Space for Commission use only.	
FAA Registration Number	
Name of Owner	
Registration Decal Number	
County	Date
Date of Registration	Registrar

AVIATION EDUCATION HIGHLIGHTS



By C. R. "Ron" Adams
Supervisor of Aviation Education

The 1967-1968 school year is well underway; in fact, it has almost reached the mid-point of the school year. Once it gets started the time seems to "fly" so fast that I don't think I'll be able to do everything I would like. But it all seems to fall into place, and eventually it gets taken care of.

FLYING CLASSROOMS

Our largest program since its inception in 1962 has been the flying classroom program. Last year we expanded from three per year to five and this year we have scheduled six flying classrooms. Six will be the "magic number" from now on.

The flying classroom schedule is filled for this year; it is also filled for the 1968-1969 school year, and we are now placing schools on our 1969-1970 schedule. If your school is interested in participating in a flying classroom program, I would urge you to get your request in to me right away. A program for 1969-1970 may seem a long way into the future, but based on past experience, we will soon be placing schools on the 1970-1971 schedule.

This school year's schedule is half completed. The third flying classroom for this year was held on November 7th. To date, flying classrooms have been conducted at:

Bridger High School, Vo-Ag 17 students, 9 adults; Culbertson High School, Vo-Ag 39 students, 7 adults; Hobson High School, Vo-Ag and Earth Science, 36 students, 8 adults.

The remainder of our 1967-1968 flying classroom schedule include the high schools at Corvallis, Harlem and Bainville.

To give you an idea of the growth and popularity of the program, I'll recap our statistics since our first flying classroom was conducted in 1962:



Shown with several of the students participating on the Bridger flights are (far left), Pete Stokke, Vo-Ag Instructor; (standing rear), Ron Adams, Aviation Education Supervisor and pilot of one aircraft; far right, "Pat" Patenaude, Red Lodge flight operator and pilot of second aircraft and Neil McCasslin of the Soil Conservation Service. Not shown, John Bangart of Roberts, pilot of the third plane.



Example of block farming near Edgar, Montana as viewed by the students.

(1) From 1962 to the end of the 1965-1966 school year, thirteen high schools participated, involving 292 students and adults.

(2) The 1966-1967 school year saw five high schools and some 142 students and adults participating.

(3) The first half of the 1967-1968 school year program has involved three high schools and 116 students and adults. From these few statistics you can readily see how the flying classroom program has grown.

AVIATION SCIENCE

Although aviation science courses are not as large in number of schools participating, they are one of this office's major program areas. There are a total of seven Montana high schools offering an aviation identi-

fied curriculum this year. These high schools are:

Glasgow High School — Mr. Francis Irle, Instructor.

C. M. Russell High School — Great Falls, Mr. Fred Oke, Instructor.

Great Falls High School — Mr. Dean Wester, Instructor.

Broadwater County High School, Townsend — Mr. Randy Vogel, Instructor.

Fairview High School — Mr. Jack Kreitinger, Instructor.

Red Lodge High School — Mr. Gary Branae, Instructor.

Helena Senior High School — Associated with the area vocational school.

The oldest program of aviation science in Montana high schools is at Cut Bank. It was not offered this year because of scheduling difficulties. Mr. Leroy Torgerson, instructor for the course, informs me that it will be offered next year.

I have been working actively with other high schools this year, investigating the feasibility of offering a course in aviation science. A number of high schools have also requested more information and assistance relative to an aviation science program.

Mr. Jack Kinna, principal of the Greenfield Community School near Fairfield, will be offering his eighth grade science class an aviation oriented unit of study. This is offered the second semester and this will be the third year he has taught the

course. I had the opportunity of visiting with Jack during the M.E.A. State Convention in Billings, and I talked with him in great detail about his program. He is most enthusiastic about the course and very satisfied with the students' response and reaction to it. He has had to develop most of the course himself from the "bits and pieces" that are available from various sources. The elementary and intermediate grades are sadly lacking in materials for aviation education. Jack Kinna's effort in this field is a fine example of what can be done if you set your mind to it. We need more of this type of determination at the "grass root" level in education in general, aviation education in particular.

AVIATION EDUCATION SEMINAR

During the M.E.A. State Convention in Billings, October 19 and 20, a seminar, "Aviation Education, Materials and Teaching Techniques," was conducted under the sponsorship of this office. The purpose of the seminar was just as the title implies, to show teachers what is available in the line of aviation education materials and some methods by which they can utilize these available materials.

Three sessions were held, two on the 19th and one on the 20th. The final session was a panel of four teachers' from Montana schools who have taught a unit in aviation education. There were teachers from the grades (sixth and eighth) and two high school instructors. This was probably the "highlight" of the entire seminar.

A total of seventy-two teachers attended the three seminar sessions. The comments from those in attendance indicate to me that such a program does have merit. As a result, we plan to have a similar seminar at next year's M.E.A. State Convention in Great Falls.

One area which we did not get a chance to discuss was the formation of a state association for the purpose of designing aviation education programs and promoting their implementation into the overall educational program. I have mentioned this in this column before and I have discussed it when talking before educational and service organizations.

I would like to hear from you, whether you are an educator, a parent or an interested citizen, on your

views of this proposal. There is a great deal of interest in aviation education around our state and I would like to see this interest and enthusiasm brought together and concentrated to achieve our specific goals. Take a few minutes and let me know your thoughts on this.

SUMMER WORKSHOPS

Much of our preliminary planning relevant to the summer workshops has been completed. We have established tentative dates and locations. Possible speakers, resource personnel and field trips are in the planning stage.

In the very near future we hope to finalize the preliminary work. Once this has been accomplished, we will be getting the information out to the schools and teachers across Montana.

On the subject of teacher training and preparation I have some information I think will be of interest to many of you. If you are presently teaching an aviation science course, and possibly you would like to upgrade your training, here is one way you may accomplish this. On the other hand, perhaps you do not offer a course in aviation science because you lack a qualified instructor on your staff, then this may be a course of action which can alleviate your problem.

One of the major problem areas is getting an instructor trained in the subject area. Montana has the summer workshop program, but these are designed to meet the needs of:

- (1) The elementary teacher.
- (2) The secondary teacher who has neither, a science background nor a background in aviation. It is, to say the least, a very basic program.

Last summer, Cessna Aircraft Company sponsored a high school aviation seminar for high school aviation teachers. Frank Mitchell, manager of Cessna's Air Age Education Division, termed it "an unqualified success." Ten high school teachers from across the United States were brought to Cessna's Wichita, Kansas facility "for a three day broad look at the general aviation industry."

In subsequent correspondence with Mr. Mitchell, he informs me that Cessna plans to expand this program, both in number of teachers and the length of the seminar. If you are interested in obtaining more infor-

mation about this seminar and how to apply, write to Mr. Mitchell at the following address: Mr. Frank Mitchell, Manager; Air Age Education Division, Cessna Aircraft Company, Wichita, Kansas 67201

FUTURE PROGRAMS

Besides expanding and upgrading our present programs, we are working on new programs, reestablishing some of our past programs and activities which were discontinued for one reason or another, but have definite value to aviation education.

These include the possible reestablishment of the scholarship program for college students, and possibly expanding it to include students enrolled in a vocational training program. We are looking into the feasibility of continuing the flight experience/training offered to students enrolled in a high school aviation science course. Another program we are considering is the establishment of an incentive award to the outstanding girl and outstanding boy enrolled in a high school aviation science course.

None of us involved in aviation education in Montana have been idle. This includes our teachers, both at the elementary and secondary levels, the workshop directors and this office. We enjoy every minute of it and we want to see aviation grow and prosper. How about you?

If you have any questions on any of our programs and projects or we can help you in any way, please write to me: Ron Adams, Supervisor of Aviation Education, P. O. Box 1698, Helena, Montana. 59601

GA SPEEDS GROWTH OF DEVELOPING NATIONS.

General aviation airplanes are assisting developing countries in their economic, social and political growth by permitting direct, immediate contact with isolated areas.

Through the use of airplanes which are able to operate into and out of the most basic airstrips, villages are getting medical service, finding markets for products and making closer ties with central governments.

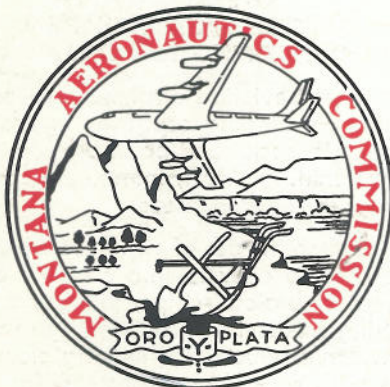
Not only is the airplane making possible these and other developments at a faster pace, it is also providing the service at significant cost savings.

MEMBER

NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in **research, development, and advancement of aviation**; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

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